



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of
Bednorz et al.

: Date: September 26, 1995

Serial No.: 08/303,561

: Group Art Unit: 1105

Filed: September 9, 1994

: Examiner: D. McGinty

For: NEW SUPERCONDUCTIVE COMPOUNDS HAVING HIGH TRANSITION
TEMPERATURE, AND METHODS FOR THEIR USE AND PREPARATION

AFFIDAVIT UNDER 37 C.F.R. 1.132

Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

I, Timothy Dinger, being duly sworn, do hereby depose and state:

That I received a B.S. degree in Ceramic Engineering (1981) from New York State College of Ceramics, Alfred University, an M.S. degree (1983) and a PhD. degree (1986), both in Material Science from the University of California at Berkley.

That I have worked as a research staff member in Material Science at the Thomas Watson Research Center of the International Business Machines Corporation in Yorktown Heights, NY from 1986 to the present.

That I have worked in the fabrication of and characterization of high temperature superconductor materials from 1987 to 1991.

That I have reviewed the above-identified patent application and acknowledge that it represents the work of Bednorz and Müller,

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which is generally recognized as the first discovery of superconductivity above 26°K and that subsequent developments in this field have based on this work.

That all the high temperature superconductors which have been developed based on the work of Bednorz and Müller behave in a similar way, conduct current in a similar manner and have similar magnetic properties.

That once a person of skill in the art knows of a specific transition metal oxide composition which is superconducting above 26°K, such a person of skill in the art, using the techniques described in the above-identified patent application, which includes all known principles of ceramic fabrication, can make the transition metal oxide compositions encompassed by claims 24-26, 86-90 and 96-108, without undue experimentation or without requiring ingenuity beyond that expected of a person of skill in the art. This is why the work of Bednorz and Müller was reproduced so quickly after their discovery and why so much additional work was done in this field within a short period of their discovery.

By: Timothy Dinger
Timothy Dinger

Sworn to before me this 26th day of September, 1995



DANIEL P. MORRIS
NOTARY PUBLIC, State of New York
No. 4888676
Qualified in Westchester County 1997
Commission Expires March 16, 1997